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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,745	06/12/2001	Barry K. Speronello		6496

7590 02/23/2006

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EXAMINER

NGUYEN, NGOC YEN M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,745

Applicant(s)

SPERONELLO ET AL.

Examiner

Ngoc-Yen M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 26, 2006 has been entered.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 61 of copending Application No. 09/760,065. Although the conflicting claims are not identical, they are not patentably distinct from each other because the mixture within the enclosed space of the membrane in copending Application '065 consists of at least a metal chlorite and at least one acid forming component, which is considered the same as the claimed "dry

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solid hydrophilic material", note that they can both be acids, clays, zeolites, etc., and since the mixture in copending Application '065 "will react with each other in the presence of water but not in the substantially absence of water to produce chlorine dioxide", the mixture of copending Application would pass both the Dry Air and Humid Air tests.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest a composition for generating chlorine dioxide which includes clays or metakolin microspheres.

Claims 8, 17, 22-24 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The "comprises", "comprising" language or the further requirement of a desiccant fails to further limit the "consisting of" language in the independent claims.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 15-19, 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Aston (2,482,891).

Aston '891 discloses a composition in which in contact with water evolves chlorine dioxide. The composition is valuable for use in the bleaching of a variety of organic materials and especially cellulosic materials (note column 1, lines 1-6). The composition is a solid mixture in which the active ingredients are a salt of chlorous acid and a solid organic acid anhydride. It is rendered stable through the inclusion of a desiccant and it may also contain inert diluent materials. Each of the components of the composition is most preferably present in finely powdered form (note column 1, lines 7-14). The solid organic acid anhydride is a "solid acid" as required in the instant claims.

As disclosed in Example II, a mixture of 25 parts of powdered sodium chlorite, 33 parts of powdered phthalic anhydride and 3 parts of anhydrous calcium chloride gave a stable composition containing 50.2% of available chlorine. The composition liberated chlorine dioxide when added to water (note column 3, lines 38-43). The presence of calcium chloride as a desiccant is not excluded by the presence claims because it is considered as a hydrophilic "salt". It should be noted that presence of a desiccant is

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required in the instant claims 17, 22, 24. In the event that the presence of a desiccant is excluded by the instant claims, Aston '891 discloses that the presence of a desiccant is to provide a stable solid mixture, thus, it can be deleted along with its attendant function, In re Wilson, 153 USPQ 740 (CCPA 1967).

The amount of calcium chloride in the above Example is 3 parts per $(25+33+3=)$ 61 parts or about 4.9%. This value is well within the claimed range. The weight ratio of the metal chlorite to the dry solid hydrophilic material is 25:33 or 0.75:1

The chlorite can be alkali or alkaline earth metal chlorite (note claim 1).

The organic acid anhydride is considered as the dry solid hydrophilic material, and since it is an acid, its pH would inherently be lower than about 10.5 or 9 as required in the instant claims.

For the limitation "for generating chlorine dioxide... 0.001 to 1,000 ppm", it is considered as an intended use limitation and it is not a limitation to be considered in the question of patentability, In re Hack 114 USPQ 162. It is well settled that terms merely setting forth intended use for, or a properly inherent in, an otherwise old composition do not differentiate the claimed composition from those disclosed in the prior art. In re Pearson 181 USPQ 641. Also, it is contrary to spirit and patent laws that patents be granted for old compositions of matter based on new uses of compositions where uses consists merely in employment of compositions; patentee is entitled to every use of which invention is susceptible, whether such use be known or unknown to him. In re Thrau, 57 USPQ 324.

The composition of Aston '891 anticipates the claimed product.

Claims 1-10, 21, 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Klatte (5,567,405).

Klatte '405 discloses a bed of zeolite crystals impregnated with sodium chlorite (note abstract and step a) of claim 1). The zeolite is dehydrated, impregnated with aqueous solution of sodium chlorite and air dried to produce impregnated zeolite crystals (note column 9, lines 44-57). The product of Klatte '405 is considered as the claimed "dry solid composition". Since the composition of Klatte '405 has all the positive components as required in the instant claims, it would pass the Dry Air and Humid Air tests and it would inherently be as capable of producing chlorine dioxide as the claimed composition.

For the intended use, note the reason as stated in the above rejection.

The composition of Klatte '405 anticipates the claimed product.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-7, 15-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aston '891.

Aston '891 discloses a composition as stated in the above rejection.

For other values or compounds beside those mentioned in the Examples, it would have been within the skill of the artisan to select any known compound and optimize the process condition, including the ratio of sodium chlorite to solid hydrophilic material, in Aston '891 to obtain the best results.

Claims 1-10, 20-21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klatte '405.

Klatte '405 discloses a product as described in the above rejection.

For other species beside the zeolite, Klatte '405 discloses that the zeolite can be impregnated with at least one of sodium chlorite, acetic acid, citric acid and chlorine. In the event that sodium chlorite is impregnated along with acetic acid or citric acid, the resulting zeolite is considered as "acidified zeolites" as required in the instant claims.

For the ratio of sodium chlorite to solid hydrophilic material, i.e. zeolite, it would have been obvious to one of ordinary skill in the art to optimize such ratio through routine optimization in the order to produce an impregnated zeolite product suitable to be used in the process of Klatte '405.

Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

The terminal disclaimer filed November 25, 2005 has been approved.

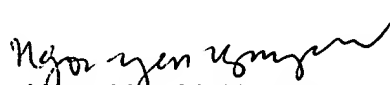
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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoc-Yen M. Nguyen whose telephone number is (571) 272-1356. The examiner is currently on Part time schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman can be reached on (571) 272-1358. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 or (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed (571) 272-1700.


Ngoc-Yen M. Nguyen
Primary Examiner
Art Unit 1754

nmn
February 21, 2006